	Application No.	Applicant(s)
Notice of Allowability	10/035,191	SHIOTA ET AL.
	Examiner	Art Unit	
	Steven P. Sax	2174	.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *Examiner's Amendment 11/19/07*.

2. ☒ The allowed claim(s) is/are *1-18,21-24,26,27,29-33,35,38-44,46-52,54-57,59,60,62-65,67,68,71-77 and 79-85.*

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All   b) ☐ Some*   c) ☐ None of the:

       1. ☒ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

       3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

       1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

       Paper No./Mail Date _____ .

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *11/19/07* .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

/Steven P Sax/
Primary Examiner, Art Unit 2174

Reasons for Allowance

1.   As confirmed in the Advisory Action mailed on 7/30/07, the previous rejection had

been overcome, and the Final Rejection mailed 4/9/07 has been withdrawn.

2.   An examiner's amendment to the record appears below. This was made to

remedy independent claims 3 and 18 to include both features of the recording condition

specific to the digital imaging recording device, and the optimal processing condition

and enhanced picture quality. Claim 19 is thus cancelled as these features have been

incorporated in the independent claim.   Should the changes and/or additions be

unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312.

To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

Please amend the following claims:

3. (Currently Amended) An image reproducing apparatus comprising:

image serving means for storing digital image data, having been recorded by a

digital recording device, and recording information together as an image file in an image

server, wherein recording information represents a recording condition specific to the

digital image recording device;

image processing means for carrying out an image processing of the image file

for enhancing a picture quality of the digital image data using the stored recording

information to determine an optimal image processing condition; and

reproducing means for reproducing the digital image data processed by the image processing means based on the optimal image processing condition.

18. (Currently Amended) An image reproducing apparatus system comprising:

an image pick up unit that records digital image data;

a processing unit that provides automatic exposure processing to the digital image data; [and]

a recording information adding unit that adds recording information including a ratio of an input light amount versus an output voltage of the digital camera to the digital image data and stores the digital image data and the recording information together as an image file in an image server;

image serving means for storing digital image data and the recording information together as an image file in an image server;

image processing means for carrying out an image processing of the image file for enhancing a picture quality of the digital image data using the stored recording information to determine an optimal image processing condition; and

reproducing means for reproducing the digital image data processed by the image processing means based on the optimal image processing condition.

19. (Canceled).

21. (Previously presented) A method for processing image data, comprising:

receiving digital image data recorded by a digital image recording device wherein recording information, which is used to enhance picture quality, is added to the digital

image data; storing the digital image data and the recording information together as an image file; processing the digital image data of the stored image file using the recording information to enhance picture quality; determining at least one optimal image processing condition to be included in the recording information; processing the digital image data of the image file using the at least one optimal image processing condition; and reproducing the digital image using the processed digital image data.

22. (Previously presented) The method of claim 21, wherein the recording information includes at least one of a content of AE processing, a designation for no correction wherein no correction to the digital image data will be made using the recording information during processing, mode setting information wherein additional processing will occur based on the mode setting information, a trimming designation for designating an area of the digital image data to be trimmed, a focusing length, a focusing position, a lighting condition, a flash occurrence condition, descriptive text information, and an outdoor weather indicator.

23. (Previously presented) The method of claim 22, wherein the lighting condition may be obtained from at least one of a color sensor and exposure meter.

24. (Previously presented) The method of claim 22, wherein mode setting information may include at least one of a portrait designation, a sun set designation, a snow designation, a scenery designation, and a monochrome designation.

26. (Previously presented) The method of claim 21, wherein the image is reproduced using at least one of a monitor and a printer.

27. (Previously presented) The method of claim 21, wherein processing employs a look-up table.

29. (Previously presented) A method for recording image data, comprising:

receiving digital image data recorded by a digital image recording device wherein

recording information, which is used to enhance picture quality, is added to the digital

image data; storing the digital image data and the recording information together as an

image file to facilitate reproduction of the image from the stored digital image data

including the recording information to enable processing with the recording information

to enhance picture quality;

determining at least one optimal image processing condition to be included in the

recording information;

processing the digital image data of the image file using the at least one optimal image

processing condition; and

reproducing the digital image using the processed digital image data.

30. (Previously presented) The method of claim 29, wherein the recording

information includes at least one of a content of AE processing, a designation for no

correction wherein no correction to the digital image data will be made using the

recording information during processing, mode setting information wherein additional

processing will occur based on the mode setting information, a trimming designation for

designating an area of the digital image data to be trimmed, a focusing length, a

focusing position, a lighting condition, a flash occurrence condition, descriptive text

information, and an outdoor weather indicator.

31. (Previously presented) The method of claim 30, wherein the lighting condition

may be obtained from at least one of a color sensor and exposure meter.

32. (Previously presented) The method of claim 30, wherein mode setting information may include at least one of a portrait designation, a sun set designation, a snow designation, a scenery designation, and a monochrome designation.

34. (Previously presented) The method of claim 29, wherein the image is reproduced using at least one of a monitor and a printer.

35. (Previously presented) The method of claim 29, wherein reproduction of the image includes processing the digital image data and the recording information while employing a look-up table.

38. (Previously presented) A method for processing image data, comprising:

receiving digital.image data representing an image recorded by a digital image recording device;

adding recording information, which is used to enhance picture quality, to the digital image data to form an image file;

processing the digital image data using the recording information;

determining at least one optimal image processing condition to be included in the recording information;

processing the digital image data of the image file using the at least one optimal image processing condition; and

reproducing the digital image using the processed digital image data using the at least one optimal image processing condition.

39. (Previously presented) The method of claim 38, wherein the recording information includes at least one of a content of AE processing, a designation for no

correction wherein no correction to the digital image data will be made using the recording information during processing, mode setting information wherein additional processing will occur based on the mode setting information, a trimming designation for designating an area of the digital image data to be trimmed, a color condition, a focusing length, a focusing position, a lighting condition, a flash occurrence condition, descriptive text information, and an outdoor weather indicator.

40. (Previously presented) The method of claim 39, wherein the lighting condition may be obtained from at least one of a color sensor and exposure meter.

41. (Previously presented) The method of claim 39, wherein mode setting information may include at least one of a portrait designation, a sun set designation, a snow designation, a scenery designation, and a monochrome designation.

42. (Previously presented) The method of claim 38, wherein the image is reproduced using at least one of a monitor and a printer.

43. (Previously presented) The method of claim 38, wherein processing employs a look-up table.

44. (Previously presented) The method of claim 38, wherein the processing obtains the digital image data and recording information from the image file.

46. (Previously presented) A method for reproducing images, comprising: receiving digital image data representing an image recorded by a digital image recording device wherein recording information, which is' used to enhance picture quality, is added to the digital image data;

storing the digital image data and the recording information together as an image file in memory; processing the digital image data utilizing the recording information to enhance picture quality; reproducing the processed digital image data;

determining at least one optimal image processing condition to be included in the recording information; processing the digital image data of the image file using the at least one optimal image processing condition; and reproducing the digital image using the processed digital image data using the at least one optimal image processing condition.

47. (Previously presented) The method of claim 46, wherein the recording information includes at least one of a content of AE processing, a designation for no correction wherein no correction to the digital image data will be made using the recording information during processing, mode setting information wherein additional processing will occur based on the mode setting information, a trimming designation for designating an area of the digital image data to be trimmed, a color condition, a focusing length, a focusing position, a lighting condition, a flash occurrence condition, descriptive text information, and an outdoor weather indicator.

48. (Previously presented) The method of claim 47, wherein the lighting condition may be obtained from at least one of a color sensor and exposure meter.

49. (Previously presented) The method of claim 47, wherein mode setting information may include at least one of a portrait designation, a sun set designation, a snow designation, a scenery designation, and a monochrome designation.

50. (Previously presented) The method of claim 46, wherein the image is reproduced using at least one of a monitor and a printer.

51. (Previously presented) The method of claim 46, wherein the memory is at least one of random access memory, a secondary storage device and an image server.

52. (Previously presented) The method of claim 46, wherein processing employs a look-up table.

54. (Previously presented) An apparatus for processing image data, comprising: a receiver receiving digital image data recorded by a digital image recording device and further providing recording information related to the digital image data and usable to enhance picture quality;

a storage module storing the digital image data and the recording information together as an image file;

a processor, operatively connected to the storage module, for processing the digital image data of the stored image file using the recording information to enhance picture quality;

a determining module determining at least one optimal image processing condition to be included in the recording information;

said processor processing the digital image data of the stored image file using the at least one optimal image processing condition; and

a reproducer reproducing the digital image using the processed digital image data.

55. (Previously presented) The apparatus of claim 54, wherein the recording information includes at least one of a content of AE processing, a designation for no correction wherein no correction to the digital image data will be made using the recording information during processing, mode setting information wherein additional processing will occur based on the mode setting information, a trimming designation for designating an area of the digital image data to be trimmed, a focusing length, a focusing position, a lighting condition, a flash occurrence condition, descriptive text information, and an outdoor weather indicator.

56. (Previously presented) The apparatus of claim 55, wherein the lighting condition may be obtained from at least one of a color sensor and exposure meter.

57. (Previously presented) The apparatus of claim 55, wherein mode setting information may include at least one of a portrait designation, a sun set designation, a snow designation, a scenery designation, and a monochrome designation.

59. (Previously presented) The apparatus of claim 54, wherein the reproducer uses atleast one of a monitor and a printer.

60. (Previously presented) The apparatus of claim 54, wherein the processor employs a look-up table.

62. (Previously presented) An apparatus for recording image data, comprising:

a receiver receiving digital image data recorded by a digital image recording device relating recording information to the digital image data and usable to enhance picture quality;

a storage module storing the digital image data and the recording information together

as an image file to facilitate reproduction of the image from the stored digital image data

using the recording information to enhance picture quality;

a determining module for determining at least one optimal image processing condition

to be included in the recording information;

a processor processing the digital image data of the stored image file using the at least

one optimal image processing condition; and

a reproducer reproducing the digital image using the processed digital image data.

63. (Previously presented) The apparatus of claim 62, wherein the recording

information includes at least one of a content of AE processing, a designation for no

correction wherein no correction to the digital image data will be made using the

recording information during processing, mode setting information wherein additional

processing will occur based on the mode setting information, a trimming designation for

designating an area of the digital image data to be trimmed, a focusing length, a

focusing position, a lighting condition, a flash occurrence condition, descriptive text

information, and an outdoor weather indicator.

64. (Previously presented) The apparatus of claim 63, wherein the lighting

condition may be obtained from at least one of a color sensor and exposure meter.

65. (Previously presented) The apparatus of claim 63, wherein mode setting

information may include at least one of a portrait designation, a sun set designation, a

snow designation, a scenery designation, and a monochrome designation.

67. (Previously presented) The apparatus of claim 62, wherein the reproducer uses at least one of a monitor and a printer.

68. (Previously presented) The apparatus of claim 62, further comprising a reproducer reproducing the image including processing the digital image data and the recording information, the reproducer including a look-up table.

71. (Previously presented) An apparatus for processing image data, comprising:

a receiver receiving digital image data representing an image recorded by a digital image recording device;

an adder adding to the digital image data, recording information, which is used to enhance picture quality, to form an image file;

a processor processing the digital image data using the recording information;

a determining module for determining at least one optimal image processing condition to be included in the recording information;

said processor processing the digital image data using the at least one optimal image processing condition; and

a reproducer reproducing the digital image using the processed digital image data using the at least one optimal image processing condition.

72. (Previously presented) The apparatus of claim 71, wherein the recording information includes at least one of a content of AE processing, a designation for no correction wherein no correction to the digital image data will be made using the recording information during processing, mode setting information wherein additional

processing will occur based on the mode setting information, a trimming designation for

designating an area of the digital image data to be trimmed, a color condition, a

focusing length, a focusing position, a lighting condition, a flash occurrence condition,

descriptive text information, and an outdoor weather indicator.

73. (Previously presented) The apparatus of claim 72, wherein the lighting

condition may be obtained from at least one of a color sensor and exposure meter.

74. (Previously presented) The apparatus of claim 72, wherein mode setting

information may include at least one of a portrait designation, a sun set designation, a

snow designation, a scenery designation, and a monochrome designation.

75. (Previously presented) The apparatus of claim 71, wherein the reproducer

uses at least one of a monitor and a printer.

76. (Previously presented)The apparatus of claim 71, wherein the processor

employs a look-up table.

77. (Previously presented) The apparatus of claim 71, ~vherein the processor

obtains the digital image data and recording information from the image file.

79. (Previously presented) An apparatus for reproducing images, comprising:

a receiver receiving digital image data representing an image recorded by a digital

image recording device relating recording information to the digital image data and used

to enhance picture quality;

a storage module storing the digital image data and the recording information together

as an image file in memory;

a processor operatively connected to the storage module processing the digital image

data utilizing the recording information to enhance picture quality;

a reproducer reproducing the processed digital image data;

a determining module determining at least one optimal image processing condition to be

included in the recording information;

said processor processing the digital image data using the at least one optimal image

processing condition; and

a reproducer reproducing the digital image using the processed digital image data using

the at least one optimal image processing condition.

80. (Previously presented) The apparatus of claim 79, wherein the recording

information includes at least one of a content of AE processing, a designatioff for no

correction wherein no correction to the digital image data will be made using the

recording information during processing, mode setting information wherein additional

processing will occur based on the mode setting information, a trimming designation for

designating an area of the digital image data to be trimmed, a color condition, a

focusing length, a focusing position, a lighting condition, a flash occurrence condition,

descriptive text information, and an outdoor weather indicator.

81. (Previously presented) The apparatus of claim 80, wherein the lighting

condition may be obtained from at least one of a color sensor and exposure meter.

82. (Previously presented)The apparatus of claim 80, wherein mode setting

information may include at least one of a portrait designation, a sun set designation, a

snow designation, a scenery designation, and a monochrome designation.

83. (Previously presented) The apparatus of claim 79, wherein the reproducer uses at least one of a monitor and a printer.

84. (Previously presented) The apparatus of claim 79, wherein the memory is at least one of random access memory, a secondary storage device and an image server.

85. (Previously presented) The apparatus of claim 79, wherein the processor employs a look-up table.

Authorization for this examiner's amendment was given in a telephone interview with Ms. Cathy Voisinet on 11/19/07.

3.   The following is an examiner's statement of reasons for allowance: The Examiner's amendment 11/19/07 places the application into condition for allowance by remedying the broader claims. The combined features of the current independent claims (1 – image reproducing method, 3 – image reproducing apparatus, 18 – image reproducing apparatus system, 21 – method for processing image data, 29 – method for recording image data, 38 – method for processing image data which recites recording information as being added, 46 – method for reproducing images, 54 – apparatus for processing image data, 62 – apparatus for recording image data which recites modules, 71- apparatus for processing image data which recites means as adder, reproducer, etc, 79 – apparatus for reproducing images which recites modules) are not set forth in the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on

Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from

the examiner should be directed to Steven P. Sax whose telephone number is (571)

272-4072. The examiner can normally be reached on Monday thru Friday, 8:30 AM -

5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David Wiley can be reached on 571-272-3923. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven P Sax/
Primary Examiner, Art Unit 2174

***